

REMARKS

By this Amendment, Applicants have canceled claims 1, 2 and 7-12 and added new claims 23-30. Accordingly, claims 3-6, and 23-30 remain pending in the application.

In the Office Action dated August 29, 2000, the Examiner rejected pending claims 3-6 and 13-22 under 35 U.S.C. § 102(a) as anticipated by Ohwada et al. 4,750,813, (hereinafter "Ohwada"). Applicant respectfully traverses those rejections for at least the following reasons.

Claim 3

Claim 3 recites a method of driving an LCD panel wherein data signal voltages supplied to the signal wires have an enlarged width in accordance with the signal wires' position with respect to a scanning wire. For example only and not by way of limitation, one embodiment is disclosed with respect to Figs. 14 and 15.

Among other things, Ohwada, does not teach or disclose any driving method where the width of the data voltages applied to the signal wires of the LCD are varied. The Examiner cites Ohwada Figure 7. However Figure 7 only shows an embodiment of the timing generating circuit of Fig. 1 which generates timing pulses $V_{tg1} \dots V_{tgk}$ all having a same width for feeding the signal wires with signal voltages retarded by the corresponding delay times $t_{d1} \dots t_{dk}$. The Applicant respectfully asks the Examiner to note that the varying width pulses of Fig 7 are not applied to any signal wires 3 of the LCD. Instead, the varying width pulses of Fig. 7 are supplied to monostable multivibrators 82 which in turn generate the series of pulses $V_{tg1} \dots V_{tgk}$ all having a same width. The pulses $V_{tg1} \dots V_{tgk}$ are in turn supplied to the various transforming circuits 7 (see Fig. 1) to ultimately generate the signals $VY_1 \dots VY_m$ which are actually applied

to the signal wires of the LCD. As clearly shown in Fig. 5, the signals $VY_1 \dots VY_m$ which are applied to the signal wires 3 all have a same width.

In other words, Ohwada teaches a method with delayed data signals applied to the signal wires 3, and does not disclose a method with varying-width data signals applied to the signal wires, as in the invention of claim 3.

Therefore, Ohwada fails to teach or suggest the method of claim 3. Accordingly, for at least this reason, Applicants respectfully submit that claim 3 is allowable over Ohwada and respectfully request that claim 3 be allowed.

Claim 4

Claim 4 recites a method of driving an LCD panel wherein data signal voltages supplied to the signal wires have a different width in accordance with a position with respect to a scanning wire. As described with respect to claim 3 above, Ohwada does not disclose a method with varying-width data signals supplied to the signal wires, as in the invention of claim 4.

Therefore, Ohwada fails to teach or suggest the method of claim 4. Accordingly, for at least this reason, Applicants respectfully submit that claim 4 is allowable over Ohwada and respectfully request that claim 4 be allowed.

Claim 5

Claim 5 recites a method of driving an LCD panel wherein a scanning signal voltage supplied to a scanning wire has a different width in accordance with a position with respect to the signal wire. For example only and not by way of limitation, one embodiment is disclosed with respect to Figs. 17 and 20. Ohwada does not teach any method with varying-width scanning signals supplied to a scanning wire, as in the invention of claim 5.

Therefore, Ohwada fails to teach or suggest the method of claim 5. Accordingly, for at least this reason, Applicants respectfully submit that claim 5 is allowable over Ohwada and respectfully request that claim 5 be allowed.

Claim 6

Claim 6 recites a method of driving an LCD panel wherein data signal voltages supplied to the signal wires have an enlarged width in accordance with the signal wires' position with respect to a scanning wire, and wherein a scanning signal voltage supplied to a scanning wire has a different width in accordance with a position of the scanning wire with respect to the signal wire.

As described with respect to claims 3 and 5 above, Ohwada does not disclose a method with varying-width data signals supplied to a signal wire, or a method with varying-width scanning signals applied to a scanning wire as in claim 6.

Therefore, Ohwada fails to teach or suggest the method of claim 6. Accordingly, for at least this reason, Applicants respectfully submit that claim 6 is allowable over Ohwada and respectfully request that claim 6 be allowed.

Claim 13

Claim 13 recites an apparatus for driving an LCD panel comprising control means for allowing a scanning signal voltage applied to a scanning wire to have a different width in accordance with a position with respect to a signal wire. For example only and not by way of limitation, one embodiment is disclosed with respect to Figs. 17 and 20. Ohwada does not teach any control means for allowing varying-width scanning signals to be applied to a scanning wire, as in the invention of claim 13.

Therefore, Ohwada fails to teach or suggest the apparatus of claim 13. Accordingly, for at least this reason, Applicants respectfully submit that claim 13 is allowable over Ohwada and respectfully request that claim 13 be allowed.

Claims 14-15 dependent from claim 13 are deemed allowable for similar reasons.

Claim 16

Claim 16 recites an apparatus for driving an LCD panel comprising signal side driving means for supplying to signal wires data signal voltages having a width enlarged in accordance with a position of the signal wires with respect to the scanning wire. For example only and not by way of limitation, one embodiment is disclosed with respect to Figs. 14 and 15. Ohwada does not teach any apparatus signal side driving means for supplying to signal wires data signal voltages having a width enlarged in accordance with a position of the signal wires with respect to the scanning wire, as in the invention of claim 16.

Therefore, Ohwada fails to teach or suggest the apparatus of claim 16. Accordingly, for at least this reason, Applicants respectfully submit that claim 16 is allowable over Ohwada and respectfully request that claim 16 be allowed.

Claims 17-18 dependent from claim 16 are deemed allowable for similar reasons.

Claim 19

Claim 19 recites an apparatus for driving an LCD panel comprising width control means for making the data signal voltages to be supplied to the signal wires to have a different width in accordance with a position with respect to the scanning wire. Ohwada does not teach any width control means for making the data signal voltages to be supplied to the signal wires to have a

different width in accordance with a position with respect to the scanning wire, as in the invention of claim 19.

Therefore, Ohwada fails to teach or suggest the apparatus of claim 19. Accordingly, for at least this reason, Applicants respectfully submit that claim 19 is allowable over Ohwada and respectfully request that claim 19 be allowed.

Claims 20-21 dependent from claim 19 are deemed allowable for similar reasons.

Claim 22

Claim 22 recites an apparatus for driving an LCD panel comprising scanning side driving means for supplying to a scanning wire a scanning signal voltage having a width enlarged in accordance with a position of the scanning wire with respect to the signal wire, and signal side driving means for supplying to a signal wire a data signal voltage having a width enlarged in accordance with a position of the signal wire with respect to the scanning wire. Ohwada does not teach such an apparatus.

Therefore, Ohwada fails to teach or suggest the apparatus of claim 22. Accordingly, for at least this reason, Applicants respectfully submit that claim 22 is allowable over Ohwada and respectfully request that claim 22 be allowed.

New claims 23-30.

Applicants respectfully submit that claims 23-30 also each define subject matter clearly patentable over the cited prior art of record. For example, claims 23-24 and 27-28 are generally directed to a system and method of driving an LCD wherein widths of time periods during which data signals are applied to the data lines are varied in accordance with the data lines' respective positions with respect to the scanning lines or driver ICs. Meanwhile, claims 25-26 and 29-30

are generally directed to a system and method of driving an LCD wherein widths of time periods during which scanning signals are applied to the scanning lines are varied in accordance with the scanning lines' respective positions with respect to the data lines or driver ICs. Ohwada does not teach such methods or systems.

Therefore, Ohwada fails to teach or suggest the systems or methods of claims 23-30. Accordingly, for at least this reason, Applicants respectfully submit that claims 23-30 are allowable over Ohwada and respectfully request that claims 23-30 be allowed.

CONCLUSION

Applicants believe that this application is now in condition for allowance and therefore request favorable consideration and prompt allowance of the pending claims.

If the Examiner deems that a telephone conference would further the prosecution of this application, the Examiner is invited to contact the undersigned representative at the telephone number listed below.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0911.

Respectfully submitted,

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